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# RTD TODAY

Resources and Technology Division  
 Economic Research Service  
 U.S. Department of Agriculture, Washington, DC

A newsletter for employees  
 and colleagues of RTD

FIRST QUARTER  
 1993

## FROM THE DIRECTOR'S OFFICE

### Preparing for Change: 1992-1993

Even when we least anticipate it, change is inevitable, endemic to the general course of events, unavoidable! And though neither an agency, a division, nor an individual can know the future, we learn that some approaches work better than others to prepare us for it. As a Division, what are those approaches? I'd like to reflect for a moment on two--recruiting and training--that RTD has embraced in the last few years and that now offer us a talented, richer, more diverse human base with which to craft the future.

Recruiting: The strength of any organization is its people. This is particularly true for a research organization which necessarily relies more heavily on human brain power, creativity, and commitment than, say, capital investments in manufacturing equipment, or acquisition of productive lands. As we look back over the last several months and years, we can congratulate ourselves on the quality of people welcomed into the Division. With their coming, RTD has been able to achieve a number of objectives. We have been able to recruit people with creativity, frontier disciplinary training, fresh quantitative skills, new ideas, and interest in addressing emerging issues and real problems. At the managerial level, we have been able to capture the enthusiasm and skills of those who combine a commitment to excellence in research and policy analysis with a genuine desire to improve the workplace community.

On the research staff, for example, RTD has added twenty eight outstanding individuals over the last eighteen months. They include Nicole Ballenger, Rachel Beattie, Henry Buist, Peter Condon, Kristy Cook, Zena Cook, Roy Darwin, Mark Denbaly, Kelly Eakin, Peter Feather, Keith Fuglie, Tracy Glascoe, Tracy Irwin-Hewitt, Cassandra Klotz, Sarah Lynch, James Matson, Ryan Moorhart, Aimee Mulville, Steve Nako, Steven Payson, Katherine Ralston, Anthony Raneses, Dave Schimmelpfennig, David Shank, Martin Shields, Steve Vogel, Jane Wertz, and Keith Wiebe. This group has already begun to contribute significantly to the research efforts of the Division. A recent review of the Division's ongoing comprehensive projects revealed, for example, the involvement of this "freshman" group of researchers in Agency priority research. In addition, members of the group have helped formulate research proposals, published in a variety of outlets, and presented numerous seminars. My impression is that each is integrating well with the ongoing research in the Division. All in all, we feel very satisfied with our recruiting labors and welcome each of the new economists to the Division. We only regret that budget exigencies have halted our ongoing recruiting efforts in midcourse. Our current inability to recruit further externally reinforces our commitment to try to preserve and nurture our new employees.

To the RTD professional support staff, we welcome Roberta Atkinson, Kimberly Glenn, Deborah Hood, LeVale Jenkins, Tamara Johnson, Cynthia Ray, Vanessa Sandidge and Nicole Stafford. The Division's professional support staff contributes essential skills to the organization by providing invaluable services

FOOTNOTE: RTD Branch and other units are abbreviated in this letter, as follows:

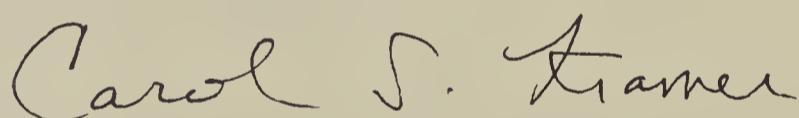
Office of the Director (OD), Environmental and Health Risk Branch (E&HR), Land and Global Resources Branch (L&GR), Resource Policy Branch (RP), Water Branch (W), and Productivity and Emerging Technologies Branch (P&ET)

to RTD through administrative and clerical support for the research program. This staff brings a range of skills to their positions. These include administrative management, budget accounting, secretarial support, and special computer graphics skills.

Training: We believe strongly in investing in people in RTD and not only "new" people. The philosophy behind this conviction is that learning and growing is a lifelong necessity. Our training budget in 1992 amounted to \$100,000, nearly 2 percent of our nonsalary expenditures. Training opportunities come in all shapes and sizes, and have been offered to all employees in one form or another. Training or educational goals and objectives are incorporated into an annual Individual Development Plan worked out between the employee and his or her supervisor. Some examples of training include economics courses at local universities, ERS short courses, management courses, and courses on automated data processing for support and other staff. Recently, RTD management approved a Division training policy which will improve the process by which Division training funds are allocated. The intent behind adoption of this policy (about which, more later) is to ensure that limited funds are made available on a consistent, equitable basis.

In addition to individual training, the Division has committed heavily to organizational development and work unit training in the last year. All staff participated in team-building activities that John Miranowski has discussed in previous issues of **RTD Today**, and management training has been provided to improve interactions between and among supervisors, researchers, and professional support staff.

As ERS and RTD look toward the future and more modest budgets, recruiting efforts and training priorities will change. If we have reduced resources for external recruiting, increasingly we must look to internal options for all our employees to attain the most powerful and useful skills that they can for job success. Both John and I welcome any thoughts you may have regarding staff training priorities. In the meantime, we remain grateful that our past recruiting efforts have paid off so well in attracting an accomplished set of researchers, managers, and professional support staff.

A handwritten signature in black ink that reads "Carol S. Kramer". The signature is fluid and cursive, with "Carol" on the first line and "S. Kramer" on the second line.

Carol S. Kramer  
Associate Director

## PROGRAM HIGHLIGHTS

### Staff Analysis Update

Analytic work in ERS is frequently categorized into research, situation and outlook, and staff analysis. Staff analysis is generally requested by USDA and other Federal policy officials and typically requires analysis of current or emerging policy issues in the agricultural and food sectors. At ERS, requests for staff analyses come through the ERS Coordinator for Staff Analysis, Milton Erickson, and assignments are made in RTD by Margot Anderson, Deputy Director for Policy Research and Staff Analysis.

Over the last several years, ERS has been asked to provide increasingly more staff analyses: in FY1985 ERS handled 162 staff analysis requests, by FY1992, 596 staff analyses were conducted (this number excluding numerous GATT requests handled by the Agency's GATT Task Force). Similarly, RTD conducted 8 staff analyses in FY1985 and 109 staff analyses in FY1992.

Staff analysis is primarily generated through the USDA's Office of the Assistant Secretary for Economics although requests are also generated by other USDA agencies, other Federal departments and the Congress. Although USDA is in a transition period, staff work continues at a fast pace and continues to be a critical ERS and RTD function. Once USDA senior staff are in place and proposed USDA reorganization occurs, there may be changes in current staff analysis procedures and changes in the tenor of staff analysis requests.

During FY1992, RTD provided analyses on a wide range of topics that included Food Safety issues, the Central Valley Project Reform Act, ethanol and other energy issues, and the environmental impact of global change. RTD also routinely reviews documents, reports, and testimony, and provides briefing materials for the Office of the Secretary. During the last two months, RTD staff analyses focused on the President's economic plan, with a particular emphasis on energy issues. Given the change in the Secretary's office, possible USDA reorganization, several non-USDA legislative actions affecting agriculture, and the beginning of farm bill activity, it is likely to be a busy year for staff work. In the near term, we can expect to receive requests regarding the President's economic plan, and requests on the reauthorization of the Clean Water Act, endangered species legislation, pesticide issues, environmental impacts of trade agreements, and farm bill issues.

The quality of our staff analysis depends on the research that supports it. While RTD does not always have a research program or project specifically tied to each staff request, our research and analytical skills should be the base for providing the needed information or analysis. To foster continuity between staff analysis and research, the Director's office periodically initiates staff analysis requests (referred to as unsolicited staff analysis), which are designed to get researchers to think about issues in anticipation of future policy questions that may be asked. In addition, the Division's forthcoming series of comprehensive research products, which were designed to address policy related agricultural economic issues, should be particularly useful in addressing staff analysis requests.

The staff analysis function can be more than a response to a request for information or analysis. It can force us to focus on issues of interest and importance to policy officials, provide insight about emerging issues, and help generate new research questions. In addition to sharpening and extending our analytic skills it is an opportunity for feedback from those who are closer to the policy decisions. Staff analysis is a unique aspect of a professional's ERS research experience.

## EVENTS AND ACTIVITIES

### Summer Intern Program

RTD is offering its Summer Internship Program this year. The program offers paid positions to undergraduate and graduate students, and provides on-the-job research experience in agricultural resource, environmental, health, and technology issues at both national and regional levels. This year twelve interns were selected from a pool of more than fifty applicants from universities around the country. Interns will arrive at RTD during May and June.

RTD has benefitted greatly from its relationship with previous interns. The students have enhanced the productivity of the Division, and enlivened the work environment. Unfortunately, budget pressures at ERS have created uncertainty regarding the future of the Summer Internship Program beyond this year.

### SWCS Meetings

John Miranowski, Tim Osborn, and Ralph Heimlich participated in a Soil and Water Conservation Society (SWCS) conference held in Kansas City on March 14-16. **The Next Generation of U.S. Conservation Policy** conference served as a kick-off for the debate over the conservation title of the next farm bill. More than 400 persons were in attendance.

Miranowski presented a paper on the interaction between the changing structure of agriculture and its implications for conservation policies and programs. Osborn presented a paper on the status and future of the Conservation Reserve Program (CRP) including policy options for dealing with expiring CRP contracts. Heimlich served on a committee to recommend conference follow-up activities. Other conference presenters included farmers, farm and commodity organization spokesmen, Congressional staff members, university officials, conservation and environmental organization representatives, agricultural chemical company spokesmen, and Federal, State, and local Government agency representatives.

Themes that emerged from conference presentations and discussion groups included:

- Conservation programs established under the 1985 and 1990 farm acts have made accomplishments but have not accomplished as much as had been expected.
- Some combination of voluntary and regulatory conservation policy is likely in the coming years.
- Expiration of CRP contracts will have to be addressed, but funds for all conservation programs will be increasingly scarce.
- In the longer-run, traditional commodity program payments are likely to be reduced or perhaps eliminated, but may be partially replaced by "environmental stewardship payments" to farmers.

SWCS will issue a white paper summarizing the results of the conference, and a number of the papers presented will appear in forthcoming issues of the Journal of Soil and Water Conservation. In a related activity, Dwight Gadsby is serving on a committee assembled by SWCS to formulate a SWCS policy position on the post-contract future of the CRP.

### Global Change Seminar Series

RTD is currently sponsoring a seminar series on global climate change. Significant research underway on climate change and its impacts on agriculture has been presented over the last few months.

In November, Harry Kaiser, Professor in the Department of Agricultural Economics at Cornell University, who is working under a cooperative agreement with RTD, presented his paper **A Farm Level Analysis of the Economic and Agronomic Impacts of Gradual Climate Warming**. In December, William R. Cline, a Senior Fellow at the Institute for International Economics in Washington, D.C., discussed selections from his book, The Economics of Global Warming, IIE, (1992). In January, Jae Edmonds of Battelle Pacific Northwest Laboratories presented his paper, **Carbon Coalitions**, and in February, Robert Mendelsohn, Professor in the School of Forestry & Environmental Studies at Yale University, spoke on **The Impact of Climatic Variation on Agriculture**. The following week, Warwick McKibbin, a Senior Fellow at the Brookings Institution, discussed the FARM model with the Future Agricultural Resources Modelling group and presented his paper, **The Global Costs of Policies to Reduce Greenhouse Gas Emissions**.

Most recently, Gary Yohe, Professor in the Economics Department at Wesleyan University, discussed the economics of uncertainty as it relates to climate change with members of the Land and Global Resources Branch in RTD and presented extensions to his research with William Nordhaus of Yale University, **Uncertainty and the Efficient Response to the Threat of Global Warming**.

### Visiting Scholars

RTD is fortunate to have 5 Visiting Scholars during the current fiscal year:

Nelson Bills -- is Professor of Agricultural Economics at Cornell University and has spent 6 months of a sabbatical at Kyoto University in Japan as a Fulbright scholar and will spend 6 months in the Resource Policy Branch working on trade and the environment issues. Bills' Fulbright research centers on factors affecting the availability of land for agriculture in Japan and the determinates of agricultural land values. His RTD research will examine issues related to trade-offs between trade-induced changes in agricultural land use, sustainable agriculture, and environmental quality.

Darrell Bosch -- is Associate Professor of Agricultural Economics at Virginia Polytechnic Institute and State University and is also spending his sabbatical in the Resource Policy Branch. Bosch's research focuses on interactions between farming practices and water quality. He is interested in how better information can help farmers use chemicals and nutrients more effectively and reduce the potential for water quality damage. Specifically he is looking at how adoption of soil nitrogen testing by farmers affects their use of nitrogen, net returns from crop production, and the potential for nitrogen losses that can damage surface and groundwater. He is also involved with RTD work on the USDA Water Quality Demonstration Projects and Sandra Batie of Virginia Tech and Bosch have a cooperative project to evaluate the potential to use Geographic Information Systems to target water quality programs at specific farms within a watershed where reductions in nonpoint source pollution can be achieved most efficiently.

Christophe Bureau -- of the National Institute for Agricultural Research, Grignon, France, is contributing to the Agency's work on developing measures of international productivity growth. Bureau's research interest is in production economics and he has been working on cost-of-production estimates for European Community countries, researching purchasing power parities, and assisting in improving ERS' data base for the European Community. More recently, he has contributed to the RTD effort to model the impact of proposed reform of the Common Agricultural Policy.

Anita Regmi -- is a Research Associate with the Department of Agricultural Economics at Cornell University. Her research has focused on identifying areas within New York State that are vulnerable to environmental degradation attributable to agriculture and developing an analytical framework to study the impact of farm policies on the environment. A farm-level discrete stochastic sequential programming model that incorporates environmental pollution arising from farm activities will be used for analysis. During her stay at RTD, she has also been involved with the study of hedonic price models in estimating farmers' willingness to pay for environmental improvement. This work is focused on two states, Iowa and New York.

Jay Variyam -- comes from the University of Georgia and has previously worked in the areas of production and finance and policy and small business economics. At RTD, Jay is in the Productivity and Emerging Technologies Branch and is engaged in several projects including modeling the long run behavior of farm output, examining the linkages between the real and financial factors in the farm economy, and developing price indices for pesticides in the U.S.

### ERS Administrator's Awards

RTD continued the tradition of having a range of activities recognized by Administrator's Special Merit Awards including professional support, research, situation and outlook, staff analysis, and team activities. RTD awardees at the 14th Annual Awards Ceremony were:

Denice Bess	For outstanding leadership, innovation, counsel, and service to the Resources and Technology Division and as a team leader to the ERS Professional Support Staff.
Western Water Policy/ California Drought Team	For outstanding, sustained effort on analysis relating to Western water policy and the California drought.
Noel Gollehon Marca Weinberg Marcel Aillery Michael Moore Glenn Schaible	
Marc Ribaudo Daniel Hellerstein	For outstanding contributions in the field of environmental valuation.
Abebeyahu Tegene Frederick Kuchler	For sustained outstanding research assessing impacts of agricultural policies on farmland values.
Immigration Reform Analysis (RTD member)	For excellence in conducting a program of service work and technical assistance relating to the effects of immigration reform on U.S. agriculture.
Harry Vroomen	
Eastern European Team (RTD members)	For outstanding team and individual effort in developing and implementing the Eastern European situation and outlook and policy analysis programs.
Stan Daberkow Gene Wunderlich	

# PEOPLE

Welcome to ...

- Kristy D. Cook (P&ET), Ph.D. in Agricultural Economics, Cornell University, who is working in the Sustainable Production Systems Section.
- Mark Denbaly (L&GR), formerly with the Macroeconomics Section in ARED, is the new Leader, Land Values and Ownership Section.
- Deborah Hood (OD), formerly with the Economics Management Staff, who joined the Office of the Director.
- Jim Matson (P&ET), M.S. in Agricultural Economics, University of California at Davis, who joined the Agricultural Productivity Section.
- Ryan Moorhart (E&HR), M.S. candidate in Agricultural Business, South Carolina State College, who is in the Production Strategies Section.
- Anthony Raneses (L&GR), B.A. in Economics, University of California at Davis, who is an intern in the Global Resources Impacts Section.
- Jane Wertz (E&HR), formerly with the Peace Corps in Zaire, who is in the Demand for Risk Reduction Section.

Appointment Changes ...

- Margriet Caswell (P&ET) is Acting Deputy Director for Technology.
- George Frisvold (L&GR) is the new Leader, Global Resources Impacts Section.
- LeRoy Hansen(W) is the new Leader, Water Quality Evaluation Section.
- Bruce Larson (RP) is the new Leader, Environmental Policy Evaluation Section.
- Robbin Shoemaker (RP) is Acting Chief, Environmental and Health Risk Branch.

Farewell to ...

- Thelma Anderson (E&HR), who retired after 32 years of service.
- Grace V. Chomo (RP), who transferred to the Crops Branch in CED.
- Kenneth Richards (L&GR), who accepted a position at Batelle Pacific Northwest Laboratories.
- Danette Woo (W), who accepted a position with Synergic Resources Corporation.

# PUBLICATIONS

(October 1992 - March 1993)

## ERS/USDA PUBLICATIONS

### **Monographs**

Crutchfield, Stephen R., Marc O. Ribaudo, LeRoy T. Hansen and Ricardo Quiroga. Cotton Production and Water Quality: Economic and Environmental Impacts of Pollution Prevention. Agricultural Economic Report No. 664. December 1992. 33 pp.

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Osborn, C. Tim., Felix Llacuna and Michael Linsenbigler. The Conservation Reserve Program: Enrollment Statistics for Signup Periods 1 - 11 and Fiscal Years 1990-92. Statistical Bulletin No. 843. November 1992. 86 pp.

Rendleman, C. Matthew. Estimation of Aggregate U.S. Demands for Fertilizer, Pesticides, and Other Inputs: A Model for Policy Analysis. Technical Bulletin No. 1813. March 1993. 28 pp.

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### **Articles**

Crutchfield, Steve and Joe Cooper. Environmental Advantages of Agricultural Products. New Crops, New Uses, New Markets. 1992 Yearbook of Agriculture. USDA. GPO. Washington, D.C. 1992. pp. 276-279.

### **Situation and Outlook**

### Periodicals

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Len Bull  
Herman Delvo

Mohinder Gill  
Harold Taylor

Noel Uri  
Marlow Vesterby

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Delvo, Herman, Mohinder Gill, Harold Taylor and Len Bull. **Peanut Production Practices and Input Use - 1991.** Agricultural Resources: Inputs. Situation and Outlook Report No. A-28. October 1992. pp. 30-35.

Gill, Mohinder, Herman Delvo, Harold Taylor and Len Bull. **Sorghum Production Practices and Input Use - 1991.** Agricultural Resources: Inputs. Situation and Outlook Report No. A-28, October 1992. pp. 36-39.

Hexem, Roger. **Farmland Values: Modest Rise Predicted.** Agricultural Outlook. AO-190. ERS, USDA. October 1992. pp. 22-24.

Irwin-Hewitt, Tracy and L. Lohr. **Economic and Environmental Impacts of Alternative Cropping Sequences in Michigan.** Agricultural Resources: Inputs. Situation and Outlook Report No. AR-29. February 1993. pp. 40-43.

Lin, Biing-Hwan, Sharon Jans, Kevin Ingram and LeRoy Hansen. **Pesticide Productivity in Pacific Northwest Potato Production.** Agricultural Resources: Inputs. Situation and Output No. AR-29. February 1993. pp. 44-48.

Osborn, Tim and D. Gadsby. **Farmers Sign on to Wetlands Program.** Agricultural Outlook. AO-190. ERS, USDA. October 1992. pp. 24-26.

Shields, Martin L. and Stan Daberkow. **The Relationship Between Cropping Patterns and Insecticide Use in Cotton Production.** Agricultural Resources: Inputs. Situation and Outlook Report No. AR-29. February 1993. pp. 49-53.

Vroomen, Harry and James Duffield. **Testing for Impacts of Immigration Reform on Farm Employment and Wages.** Agricultural Resources: Inputs. Situation and Outlook Report No. AR-28. October 1992. pp. 47-53.

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Arnade, Carlos, Daniel Pick and Utpal Vasavada. **Testing Dynamic Specification for Import Demand Models: The Case of Cotton.** International Agricultural Trade Research Consortium. Paper No. 93-2. January 1993.

Babula, Ronald A. and Utpal Vasavada. **Comparing Dynamic Farm/Nonfarm Relationships Across Four Federal Reserve Districts.** Eastern Economics Association Meetings. Washington, D.C. March 19-21, 1993.

Ball, Eldon. **Measuring Productivity of U.S. Agriculture: Methods and Data.** Joint Agriculture Canada-Economic Research Service Workshop on Measuring Productivity and Related Data for Comparable Regional, National, and International Comparison. Ottawa, Canada. October 22-23, 1993.

Ball, Eldon, Knox Lovell, Richard Nehring and Agapi Somwaru. **Incorporating Undesirable Outputs Into Models of Production: An Application to U.S. Agriculture.** American Economics Association Annual Meetings. Anaheim, California. January 4-8, 1993.

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Cooper, Joe. **Nonmarket Benefits of Salmon Recovery Plans.** W-133 Regional Project Meeting. Santa Fe, New Mexico. March 15-16, 1993.

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